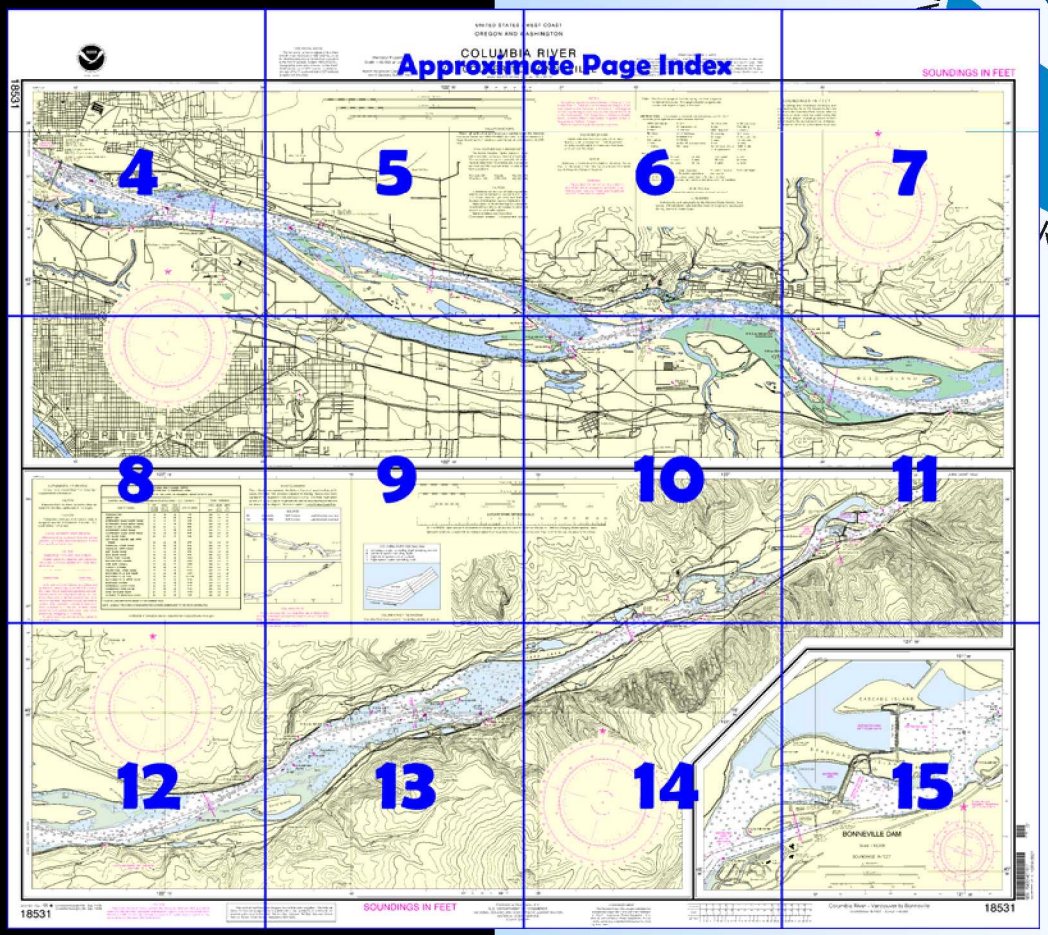
BookletChart™

Columbia River – Vancouver to Bonneville

(NOAA Chart 18531)

A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ *Complete, reduced scale nautical chart*
- ☑ *Print at home for free*
- ☑ *Convenient size*
- ☑ *Up to date with all Notices to Mariners*
- ☑ *United States Coast Pilot excerpts*
- ☑ *Compiled by NOAA, the nation's chartmaker.*



NOAA

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

DEPARTMENT OF COMMERCE

Home Edition (not for sale)

Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
301-713-2770

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

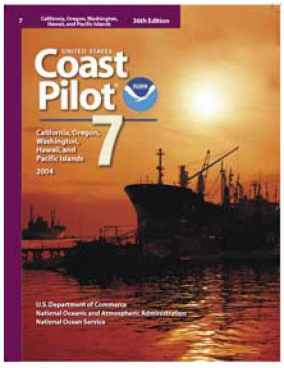
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 7, Chapter 10 excerpts]

(221) **Columbia Slough,** a narrow back channel roughly parallel to Columbia River, empties into the Willamette about 0.4 (0.5) mile above its mouth. Least depth in the slough is usually less than 2 feet. A dam has been constructed across the slough about 7.3 miles above the mouth.

(224) **Portland,** on Willamette River about 9 (10.4) miles from its mouth, is the principal city of the Columbia River system and one of the major ports on the Pacific coast. The port has over 25 deep-draft piers and wharves on both sides of the Willamette River between its junction with the Columbia and Ross Island. In addition there are extensive facilities for small vessels and barges S of Hawthorne Bridge and at North Portland Harbor, S of Hayden Island. It has extensive commerce, both foreign and domestic, and is the port of call for many lines of coastwise, intercoastal, and transpacific steamships.

(225) The **Port of Portland,** created by the State in 1891, is controlled by a Port Commission and administered by an executive director. The port owns four marine terminals, Port of Portland Ship Repair Yard, and dredges the channel between Broadway and Ross Island Bridges; it also assists the Corps of Engineers with other dredging in the Willamette and Columbia Rivers.

(326) The main channel of the Columbia River favors the Washington shore, N of **Hayden Island** and **Tomahawk Island,** from **Mathews Point** to Ryan Point. Overhead clearances are at **Columbia River Datum.** Overhead power cables with a least clearance of 220 feet cross at Mile 90.6 (104.2).

(327) **North Portland Harbor** is that portion of the river channel between the Oregon shore and Hayden Island. The lower or W entrance is at Mile 89.0 (102.5); the upper or E entrance is at Mile 94.5 (108.8).

(329) **Vancouver** is on the Washington side of the Columbia River at Mile 92 (106). The port is a water outlet for a large lumber-producing section in SW Washington, as well as a distributing point for a fair share of the grain produced in the interior of Washington and Oregon. Bulk bentonite clay, paper, petroleum products, fertilizer, and general merchandise are also shipped. Steel, wood products, chemicals, and automobiles are the major imported items at Vancouver.

(348) From Vancouver to Bonneville, Mile 126 (145), Columbia River passes through the impressive **Columbia River Gorge,** flanked on each side by railroads and highways. Commerce on the river in this section consists mostly of pleasure craft and barges.

(350) **Ryan Point,** 1.4 miles ESE of the Interstate 5 highway bridge, is the site of a former shipyard and is now an industrial park. A public launching ramp is at the park.

(353) A **special anchorage** is between **Tri-Club Island** and **Government Island**.

(354) **Camas,** at Mile 104.3 (120.0) on the Washington side, has a large papermill which maintains its own wharf on **Camas Slough,** N of **Lady Island.**

(358) There are five power cables crossing **Ione Reef,** S of Lady Island. The least clearance is 133 feet.

(359) The entrance to **Sandy River,** on the Oregon side opposite Camas, bares at low water. At higher flood stages, passage up Sandy River as far as **Troutdale** is possible.

Local magnetic disturbance

(360) Differences of as much as 8° from the normal variation have been observed between **Tunnel Point** and **Point Vancouver,** E of **Reed Island.**

(362) In general, currents run fair with the main channels with considerable intensity, increasing in regions upstream toward Bonneville. Exceptions are the turn in the channel at Washougal Light 50, where a NW set prevails; SW of **Cape Horn,** where a W set is experienced; and the region between Fashion Reef and Multnomah Falls, where a S set is experienced.

(363) Between **Corbett,** Mile 110.3 (127), and The Dalles, Mile 165 (189.8), the river flows between the bold mountains of the **Cascade Range.** In this stretch, winds of considerable force prevail during much of the time; generally they blow upstream in summer and downstream in winter. Daily peak velocities vary from 6 to 42 knots, but Corps of Engineers officials at Bonneville Dam measured gusts as high as 76 knots during 1960-62.

(364) Near **Warrendale,** Mile 123 (141.5), the river becomes very constricted within less than a mile and continues so almost to the approach to the locks of Bonneville Dam, at the lower end of **Bradford Island.**

(365) **Beacon Rock,** 840 feet high and 300 yards inshore, is on the Washington side opposite Warrendale. It is a prominent dark gray rock outcropping of volcanic origin. A State park of the same name surrounds the rock. The park maintains a mooring float just inside the entrance to the channel W of **Pierce Island.**

Table of Selected Chart Notes

Corrected through NM Sep. 24/05
Corrected through LNM Sep. 13/05

HEIGHTS in feet.
Contour elevations referred to mean sea level.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 7 for important supplemental information.

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.

Mercator Projection
Scale 1:40,000 at Lat 45° 41'

North American Datum of 1983
(World Geodetic System 1984)

LOCAL MAGNETIC DISTURBANCE
Differences of as much as 8° from the normal variation have been observed between Tunnel Point and Point Vancouver.

CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Portland, OR	KIG-98	162.550 MHz
Woodland, WA	WNG-604	162.525 MHz

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

ACKNOWLEDGMENT
The National Ocean Service acknowledges the exceptional cooperation received from members of the Ft. Vancouver Power Squadron, District 32, United States Power Squadrons, in continually providing essential information for revising this chart.

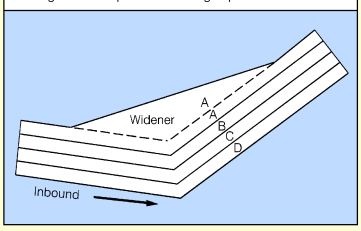
HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.570" southward and 4.302" westward to agree with this chart.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Wash., or at the Office of the District Engineer, Corps of Engineers in Portland, Oregon.
Refer to charted regulation section numbers.

NOTE B
Waterway is unstable and subject to shoaling. Buoys may not necessarily mark best water and are not charted due to frequent change in location.

Tides: The diurnal range of the tide during low river stages is 1.8 feet at Vancouver. The range becomes progressively smaller with higher stages of the river.

COLUMBIA RIVER TAB DIAGRAM
A Left outside quarter controlling depth (including widener)
B Left inside quarter controlling depth
C Right inside quarter controlling depth
D Right outside quarter controlling depth



COLUMBIA RIVER TAB DIAGRAM
Columbia River main channel - Controlling depths for outside quarters include the adjacent widener/fillet when applicable.

Additional information can be obtained at nauticalcharts.noaa.gov.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

PRINT-ON-DEMAND CHARTS
NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://NauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com.

NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE
COAST SURVEY

HORIZONTAL DAT
The horizontal reference dat
is North American Datum of 1983
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average of 0.570" southward and
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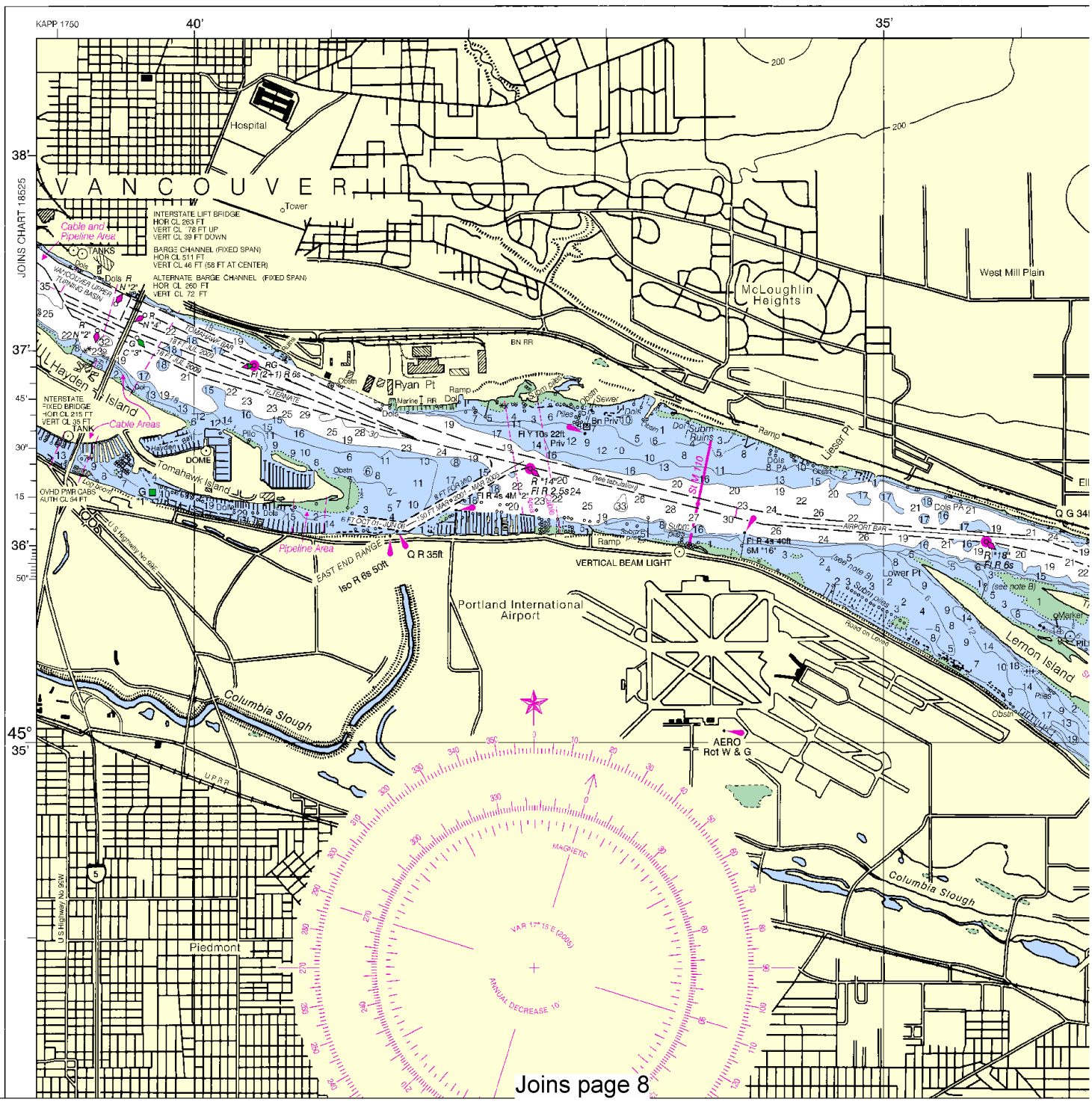

4

North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles
1 ½ 0 1 2 3

Yards
1000 0 1000 2000 3000 4000 5000

See Note on page 5.

UNITED STATES - WEST COAST

OREGON AND WASHINGTON

COLUMBIA RIVER

VANCOUVER TO BONNEVILLE

Formerly C&GS 6156, 1st Combined Ed., Apr. 1953 G-1951-739

ATUM
datum of this chart
983 (NAD 83), which
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n 1984 (WGS 84).
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st be corrected an
nd 4.302" westward

Mercator Projection
Scale 1:40,000 at Lat 45° 41'

North American Datum of 1983
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122° 30' 29' 45' 30' 15' 28' 50' 27'

Nautical Miles
Statute Miles
Yards

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NOTE B

Waterway is unstable and subject to shoaling may not necessarily mark best water and are no due to frequent change in location.

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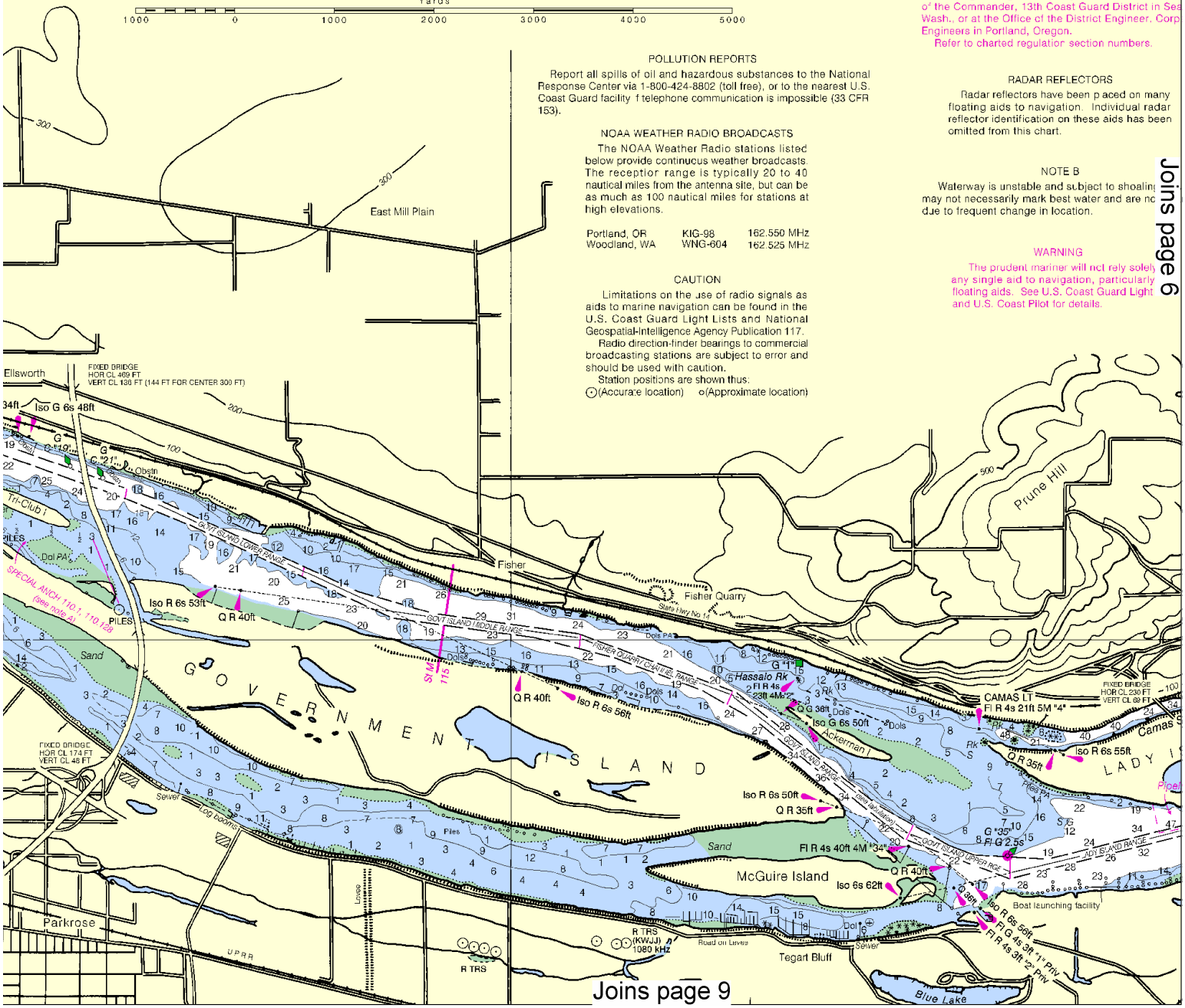
Joins page 6



Joins page 9

This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:53333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

UNITED STATES - WEST COAST

OREGON AND WASHINGTON

COLUMBIA RIVER

VANCOUVER TO BONNEVILLE

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122° 30' 29' 45" 30" 15' 28' 50" 27' 25'

utical Miles 1 2 3

atute Miles 1 2 3

Yards 2000 3000 4000 5000

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ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code
Al alternating	IQ interrupted quick	N nun
B black	Iso isophase	OBSC obscured
Bn beacon	LT HO lighthouse	Oc occulting
C can	M nautical mile	Or orange
DIA diaphone	m minutes	Q quick
F fixed	MICRO TR microwave tower	R red
Fl flashing	Mkr marker	Ra Ref radar reflect
		R Bn radiobeacon

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters
bk broken	G gravel	h hard	Rk rock
Cy clay	Grs grass	M mud	S sand

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful
ED existence doubtful	PA position approximate	Rep reported

,21, Wreck, rock, obstruction, or shoal swept clear to the depth indicated.

(2) Rocks that cover and uncover, with heights in feet above datum of soundi

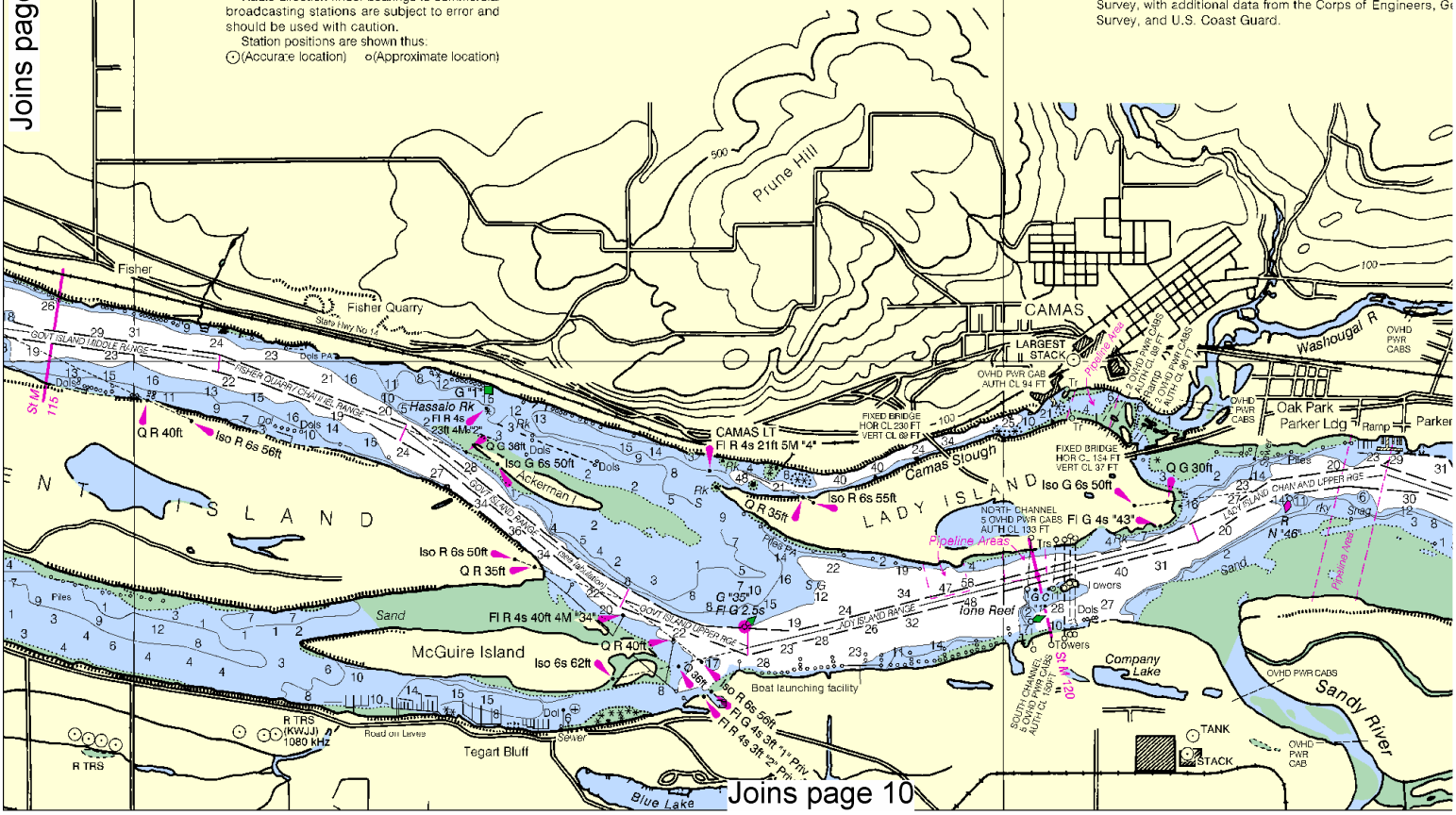
HEIGHTS in feet.

Contour elevations referred to mean sea level.

AUTHORITIES

Hydrography and topography by the National Ocean Serv Survey, with additional data from the Corps of Engineers, Ge Survey, and U.S. Coast Guard.

Joins page 5



Joins page 10

North

Printed at reduced scale. ~~SCALE 1:40,000~~

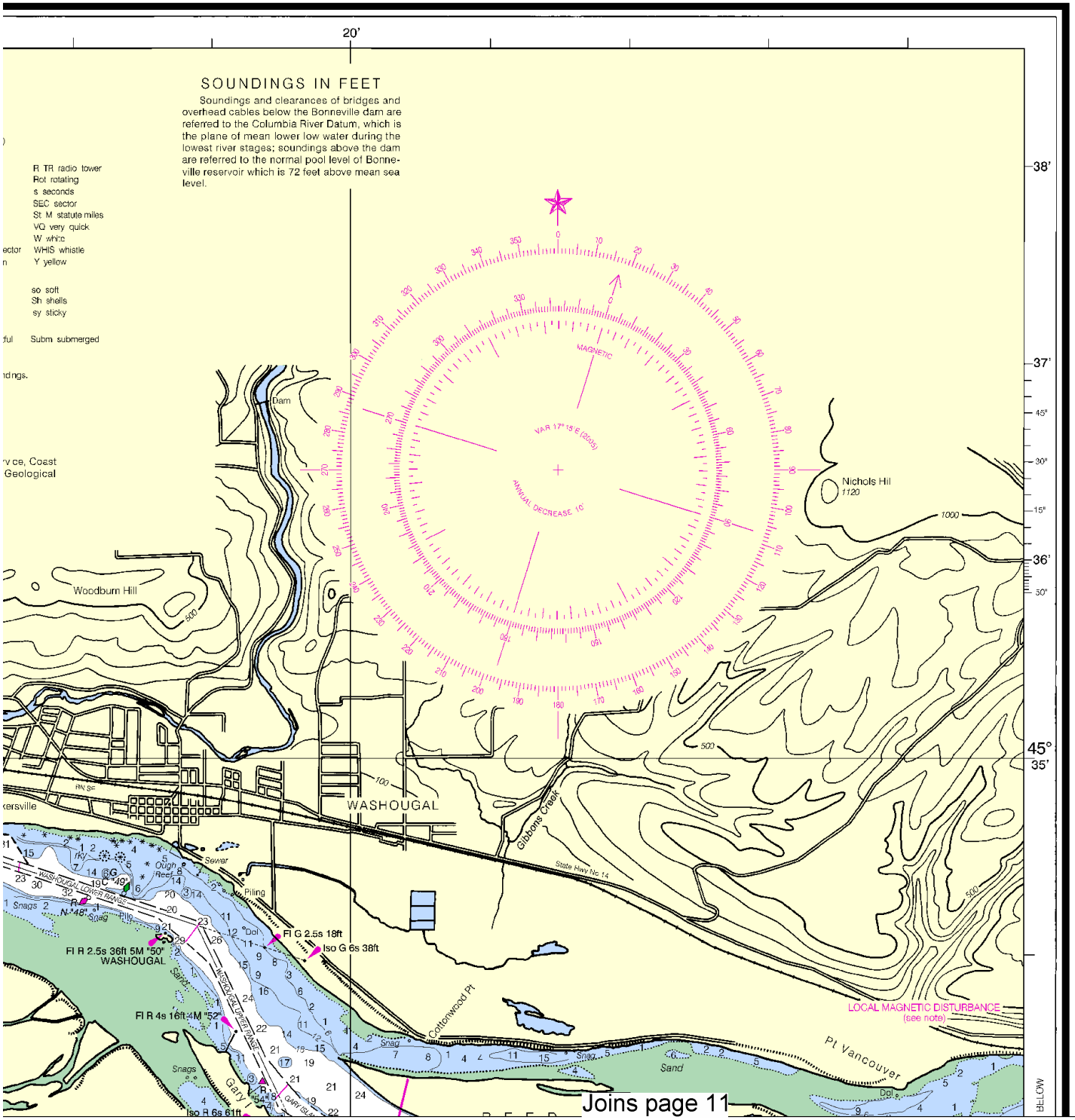
Nautical Miles 1 ½ 0 1 2 3

Yards 1000 0 1000 2000 3000 4000 5000

See Note on page 5.

)AA for Notices to Mariners
)emand technology. New
a'rts. Ask your chart agent
:tp://NauticalCharts.gov,
):://OceanGrafix.com, or

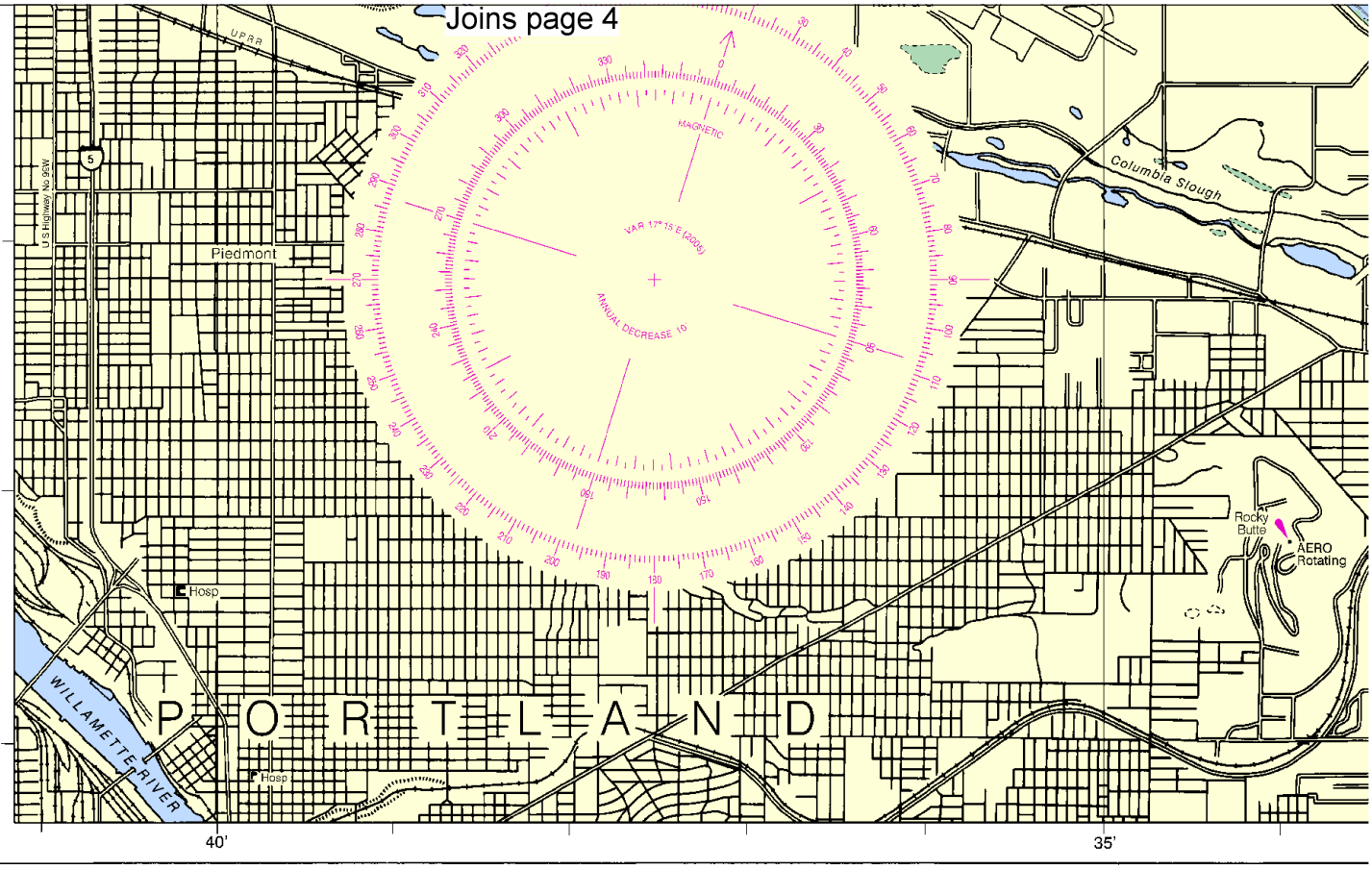
SOUNDINGS IN FEET



Joins page 11

This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 5209 12/29/2009,
NGA Weekly Notice to Mariners: 0310 1/16/2010,
Canadian Coast Guard Notice to Mariners: n/a .

Joins page 4



KAPP 1752

122° 15'

39'

37'

45'

30'

15'

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

LOCAL MAGNETIC DISTURBANCE

Differences of as much as 8° from the normal variation have been observed between Tunnel Point and Point Vancouver.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

COLUMBIA RIVER CHANNEL DEPTHS
TOMAHAWK BAR TO BONNEVILLE LOCKS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 28, 2009

NAME OF CHANNEL	CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE: LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	PROJECT DIMENSIONS: WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CHD (FEET)
TOMAHAWK BAR	16	17	18	4-09	300	3.7	27
AIRPORT BAR	16	16	17	3-09	300	2.8	27
GOVERNMENT ISLAND LOWER RANGE	17	17	16	3-09	300	1.0	27
GOVERNMENT ISLAND MIDDLE RANGE	16	16	17	3-09	300	1.7	27
FISHER QUARRY CHANNEL	29	24	22	3-09	300	1.0	27
GOVERNMENT ISLAND RANGE	23	27	29	3-09	300	1.1	27
GOVERNMENT ISLAND UPPER RANGE	17	20	23	4-09	300	0.8	27
LADY ISLAND RANGE	21	23	28	4-09	300	2.1	27
LADY ISLAND CHANNEL AND UPPER RANGE	28	29	21	4-09	300	0.9	27
WASHOUGAL LOWER RANGE	19	27	30	4-09	300	1.5	27
WASHOUGAL UPPER RANGE	22	20	28	4-09	300	1.1	27
GARY ISLAND CHANNEL	17	16	16	4-09	300	0.6	27
REED ISLAND CHANNEL	19	16	14	4-09	300	2.5	27
TUNNEL POINT CHANNEL	25	26	28	4-09	300	0.8	27
ROOSTER ROCK CHANNEL	27	24	25	4-09	300	1.5	27
CAPE HORN CHANNEL	34	33	35	4-09	300	2.1	27
CANDIANA CHANNEL	23	40	35	4-09	300	1.0	27
FASHION REEF LOWER RANGE	11	12	14	4-09	300	2.4	27
MULTNOMAH FALLS RANGE	13	21	17	4-09	300	1.1	27
MULTNOMAH FALLS TURN	13	16	21	4-09	300	0.8	27
MULTNOMAH FALLS UPPER RANGE	19	24	27	4-09	300	3.2	27
MCGOWANS CHANNEL	35	28	25	4-09	300	1.1	27
WARRENDALE LOWER RANGE	20	21	23	4-09	300	0.9	27
WARRENDALE UPPER RANGE	24	28	22	4-09	300	0.7	27
HAMILTON ISLAND REACH	29	29	28	4-09	300	1.0	27
ENTRANCE TO BONNEVILLE LOCKS	19	21	19	4-09	300	1.2	27

* CONTROLLING DEPTHS ROUNDED TO THE NEAREST FOOT

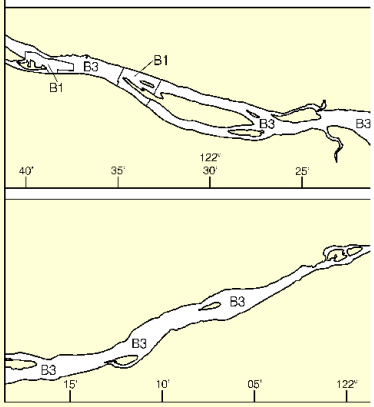
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Additional information can be obtained at nauticalcharts.noaa.gov.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recer survey information that has been evaluated for charting. Su banded in this diagram by date and type of survey. Chanr by the U.S. Army Corps of Engineers are periodically resu not shown on this diagram. Refer to Chapter 1, United Sta

SOURCE			
B1	1990-2003	NOS Surveys	partia
B3	1940-1969	NOS Surveys	partia



COLUMBIA RIVER

Distances along the Columbia River are in Stat and are measured eastward from the mouth and ii thus:

Tables for converting Statute Miles to Internatic tical Miles are given in U.S. Coast Pilot 7.

Joins page 12

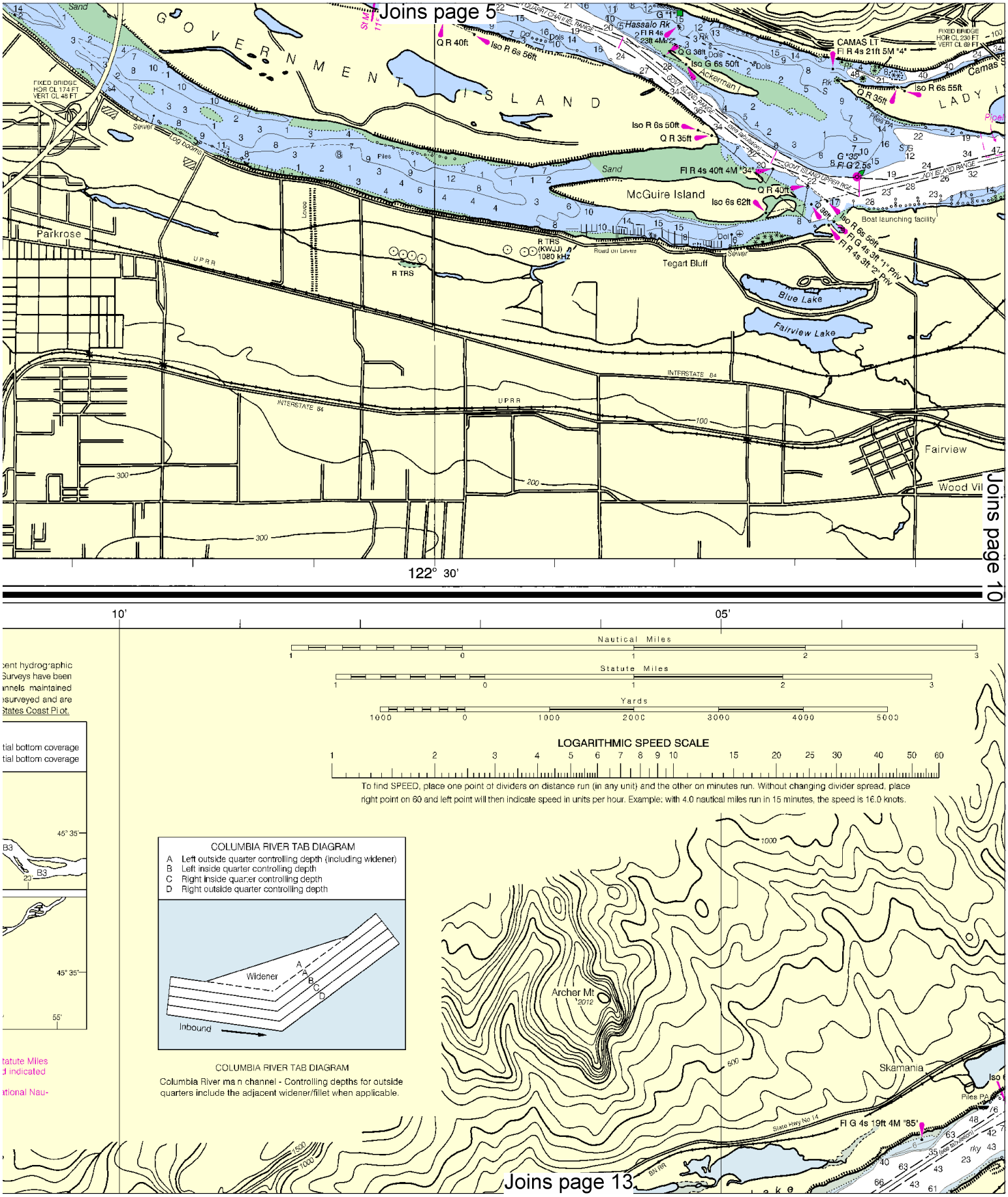
North

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

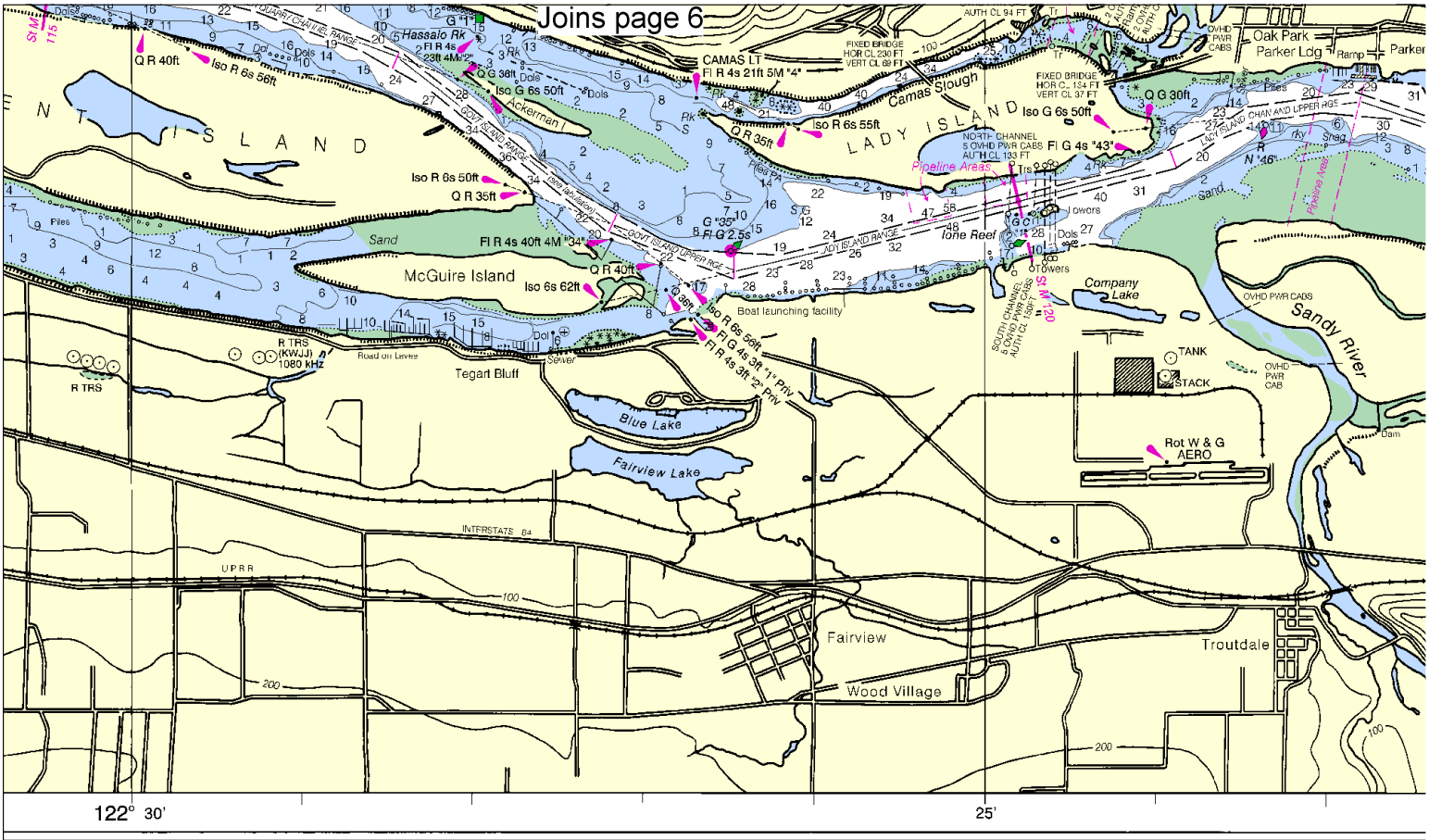
See Note on page 5.



COLUMBIA RIVER TAB DIAGRAM

Columbia River main channel - Controlling depths for outside quarters include the adjacent widener/fillet when applicable.

Joins page 6



Joins page 9

05'

122°

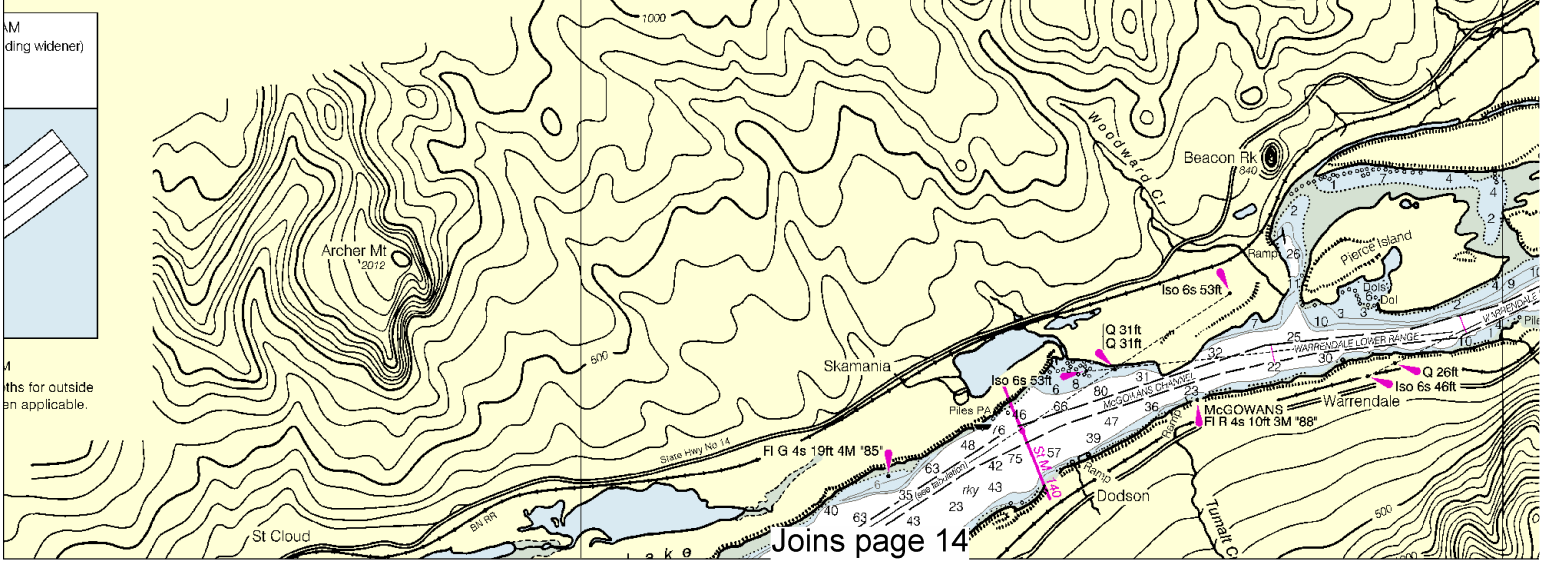
Nautical Miles

Statute Miles

Yards

LOGARITHMIC SPEED SCALE

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.



Joins page 14

10

North

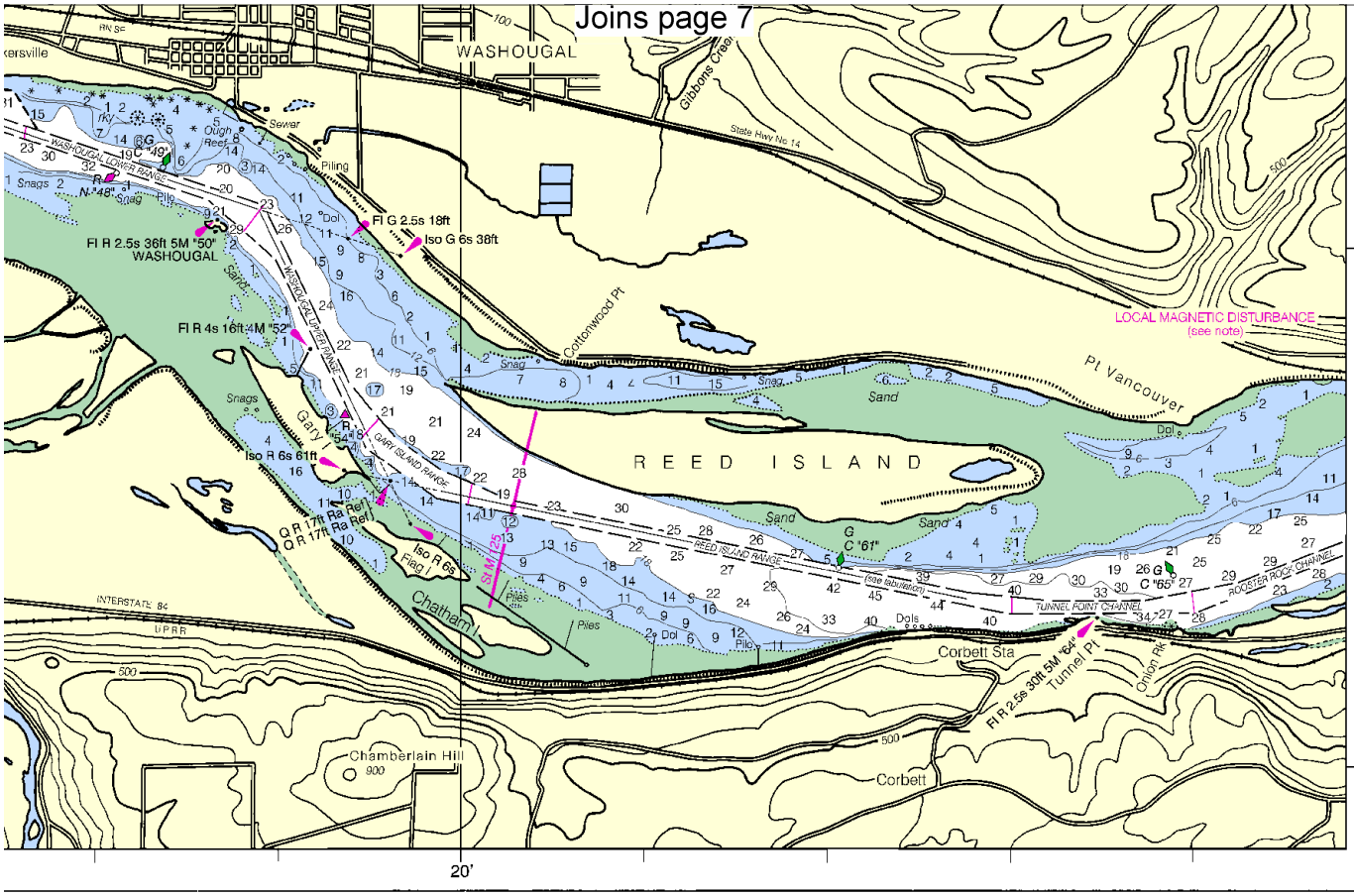
Printed at reduced scale. ~~SCALE 1:40,000~~

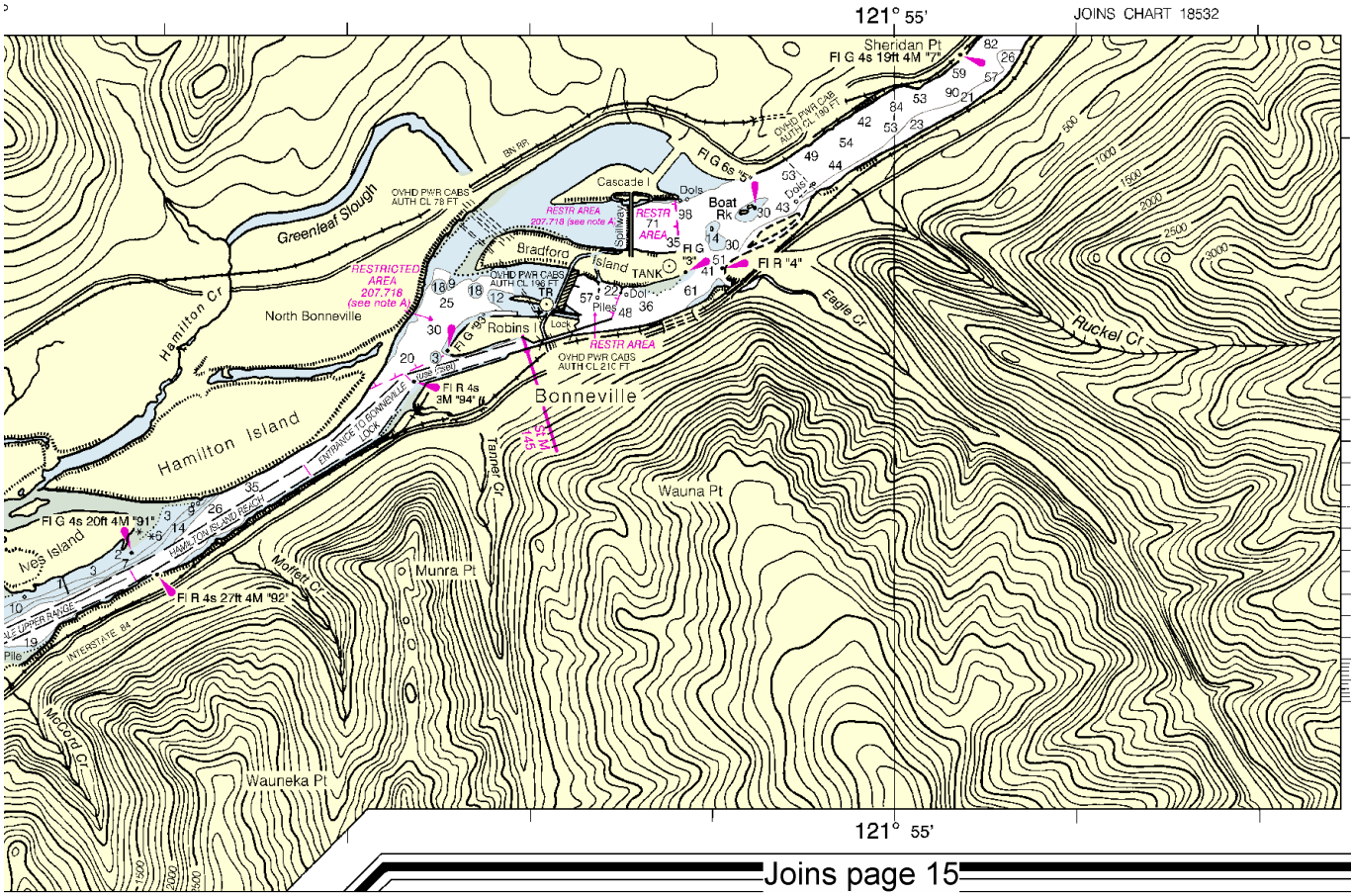
Nautical Miles

Yards

See Note on page 5.

Joins page 7





Joins page 15

cables and submarine pipeline and cable areas are shown as:

Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

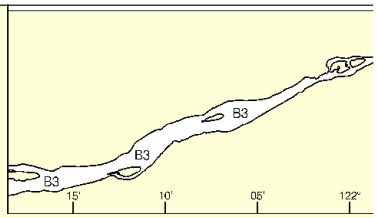
Covered wells may be marked by lighted or unlighted buoys.

Joins page 8

CAPE HORN CHA	33	35	4-09	300	2.1	27
CANDIANA CHANNEL	40	35	4-09	300	1.0	27
FASHION REEF LOWER RANGE	11	12	14	4-09	300	2.4	27
MULTNOMAH FALLS RANGE	13	21	17	4-09	300	1.1	27
MULTNOMAH FALLS TURN	13	16	21	4-09	300	0.8	27
MULTNOMAH FALLS UPPER RANGE	19	24	27	4-09	300	3.2	27
MCGOWANS CHANNEL	35	28	25	4-09	300	1.1	27
WARRENDALE LOWER RANGE	20	21	23	4-09	300	0.9	27
WARRENDALE UPPER RANGE	24	28	22	4-09	300	0.7	27
HAMILTON ISLAND REACH	20	29	28	4-09	300	1.0	27
ENTRANCE TO BONNEVILLE LOCKS	19	21	19	4-09	300	1.2	27

* CONTROLLING DEPTHS ROUNDED TO THE NEAREST FOOT

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION



COLUMBIA RIVER

Distances along the Columbia River are in Stat and are measured eastward from the mouth and i thus.

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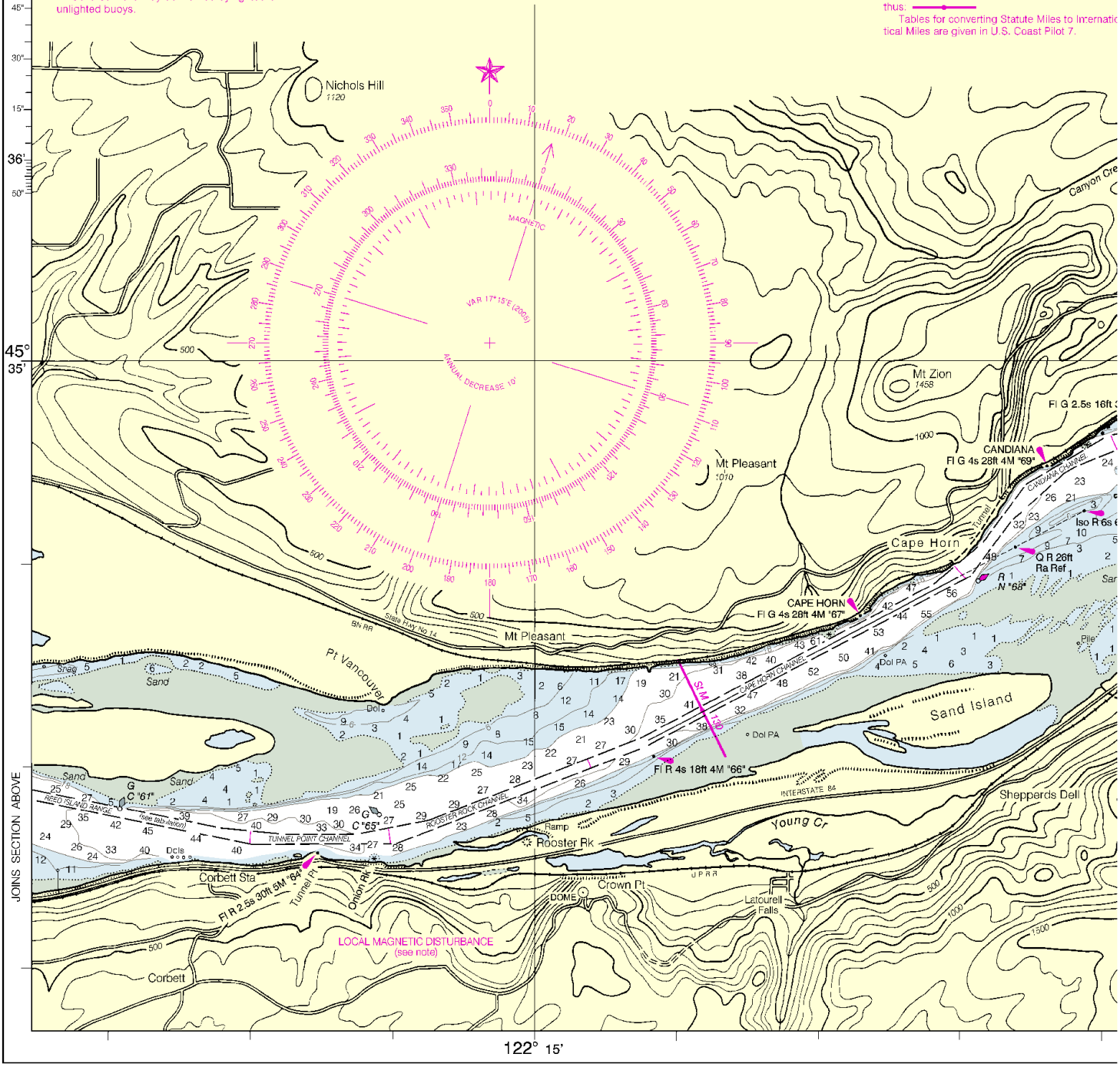
Additional information can be obtained at nauticalcharts.noaa.gov.



22nd Ed., Sep. / 05 ■ Corrected through NM Sep. 24/05
Corrected through LNM Sep. 13/05

18531

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intel igence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard distric to the dates shown in the lower left hand corner.

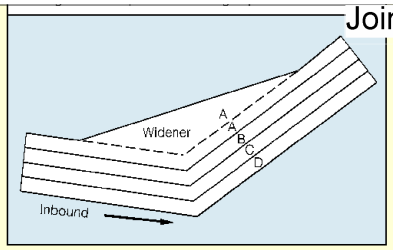
This nautical chart has been designed to promote safe navigation. T Ocean Service encourages users to submit corrections, additions, or co improving this chart to the Ch ef, Marine Chart Division (N/CS2), Natic Service, NOAA, Silver Spring, Maryland 20910-3282.

North

Printed at reduced scale. ~~SCALE 1:40,000~~

See Note on page 5.

Joins page 9



COLUMBIA RIVER TAB DIAGRAM

Columbia River main channel - Controlling depths for outside quarters include the adjacent widener/fillet when applicable.

Joins page 14

SOUNDINGS IN FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

ACKNOWLEDG
The National Ocean Servi
exceptional cooperation rec
of the Ft. Vancouver Pow
trict 32, United States Powe
tinually providing essential
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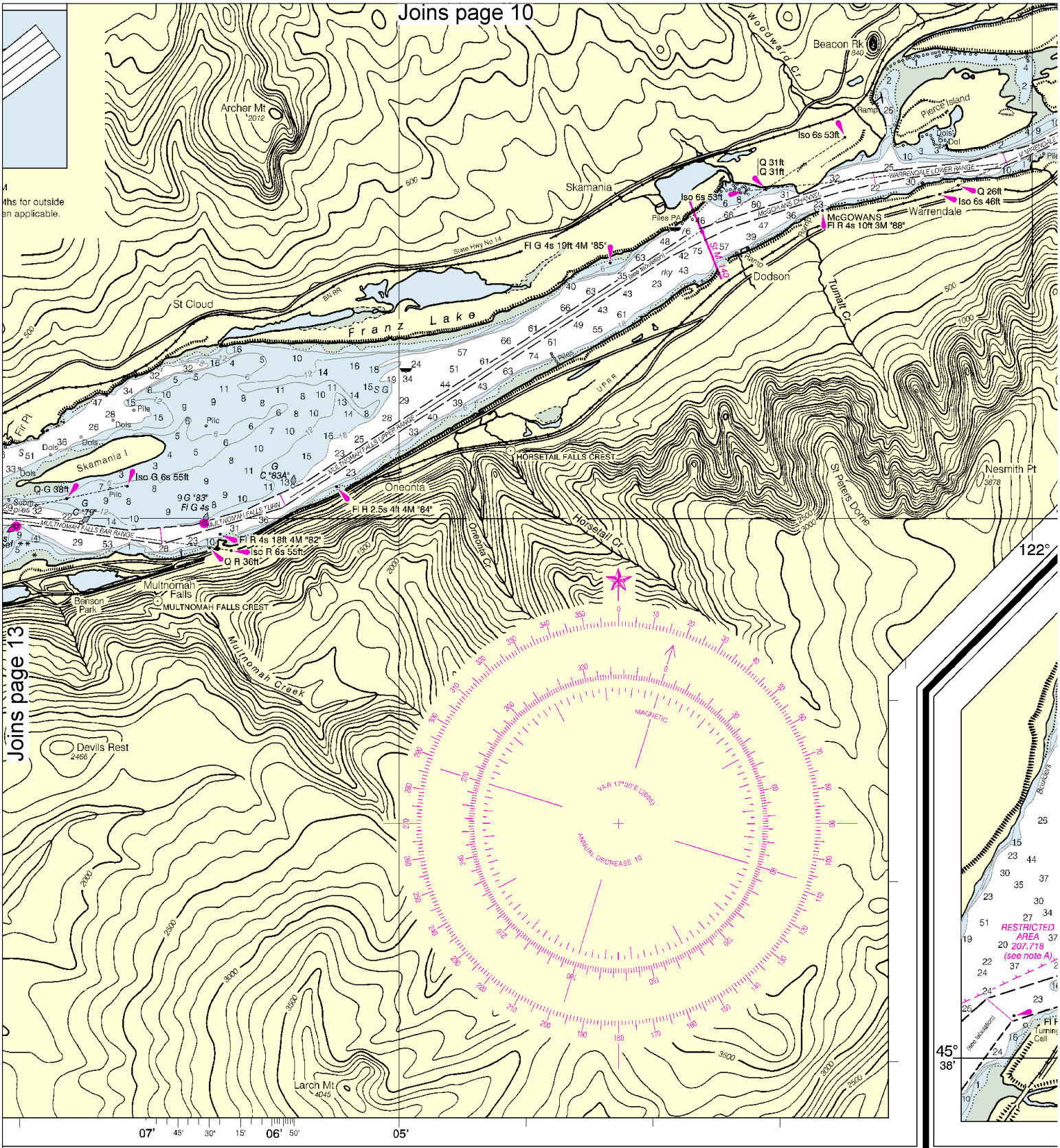


IN FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

ACKNOWLEDGMENT
The National Ocean Service acknowledges the exceptional cooperation received from members of the Ft. Vancouver Power Squadron, District 32, United States Power Squadrons, in continually providing essential information for revising this chart.

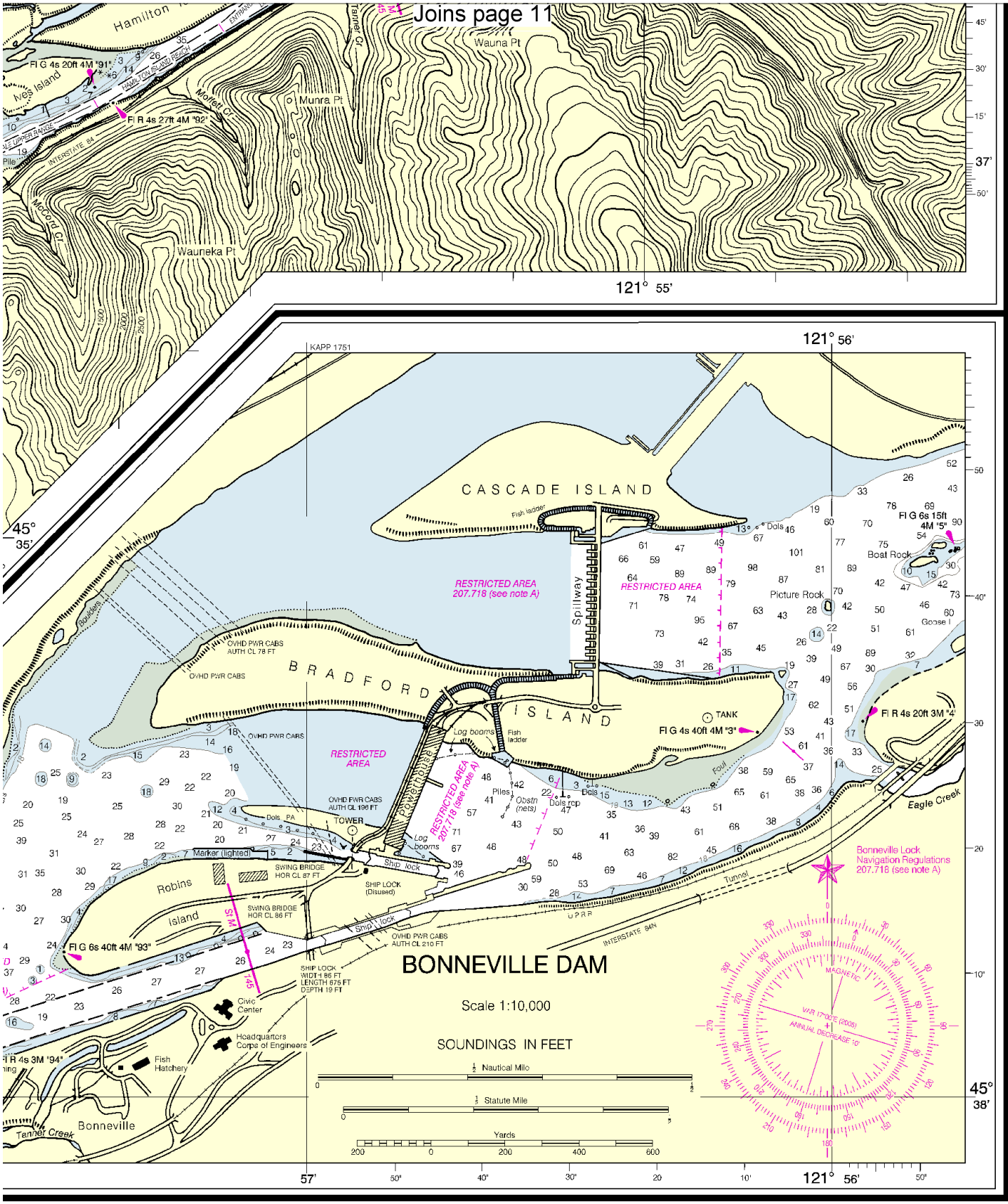
FATHOMS	1	2	3	1		
FEET	6	12	18	24	3	
METERS	1	2	3	4	5	6

North

Printed at reduced scale. ~~SCALE 1:40,000~~ See Note on page 5.

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000



Columbia River - Vancouver to Bonneville

SOUNDINGS IN FEET - SCALE 1:40,000

18531

ED. NO. 22

NSN 7642014011617

NGA REFERENCE NO. 18XHA18531

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.
Coast Guard Search & Rescue – 206-220-7001
Coast Guard Portland – 503-240-9301
Commercial Vessel Assistance – 1-800-367-8222

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

NOAA, The Nation's Chartmaker

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Official BookletCharts™ – BookletCharts™ are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts™ – PocketCharts™ are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

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Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.